grindex

Submersible slurry pumps for quarries, mines, dredging and other abrasive applications

Slurrypumps

Bravo 20
Bravo 30
Bravo 40
Bravo 50
Bravo 60
Bravo 70

60 Hz

Submersible slurry pumps for pumping fluids with abrasive solids

Typical applications include dredging, cleaning of settling ponds, coal and ore slurries, bentonite, coal washing water, sewage treatment plants, steel works, quarries, mines and many other industries that requires pumps with very high durability.

Each part of the BRAVO pump is designed for maximum endurance and reliability – an absolute must when pumping slurry. Wear is reduced by using NiHard 4 for all hydraulic components. NiHard 4 is a nickel alloy and one of the hardest materials available today. All Bravo pumps can handle liquids with pH values from 4 up to 10.

We are creating customer benefits after user requirements

Grindex has supplied reliable and durable pumps to mines, construction sites and other demanding applications for 50 years. With these slurry pumps, we are now reaching other applications with trouble free dewatering. The five models in the series covers the most pump requirements within mines, quarries, tunnel sites, process industries, construction sites and other demanding applications. All Grindex pumps are designed to reduce the operation costs.

Grindex – trouble free dewatering

The Bravo pumps are designed for pumping abrasive solids in suspension.

The agitator stirs up settled solids.

When dredging, the slurry pump can be equipped with external water jets to stir up settled solids.

Bravo – ready for dredging on the bottom of a lake.

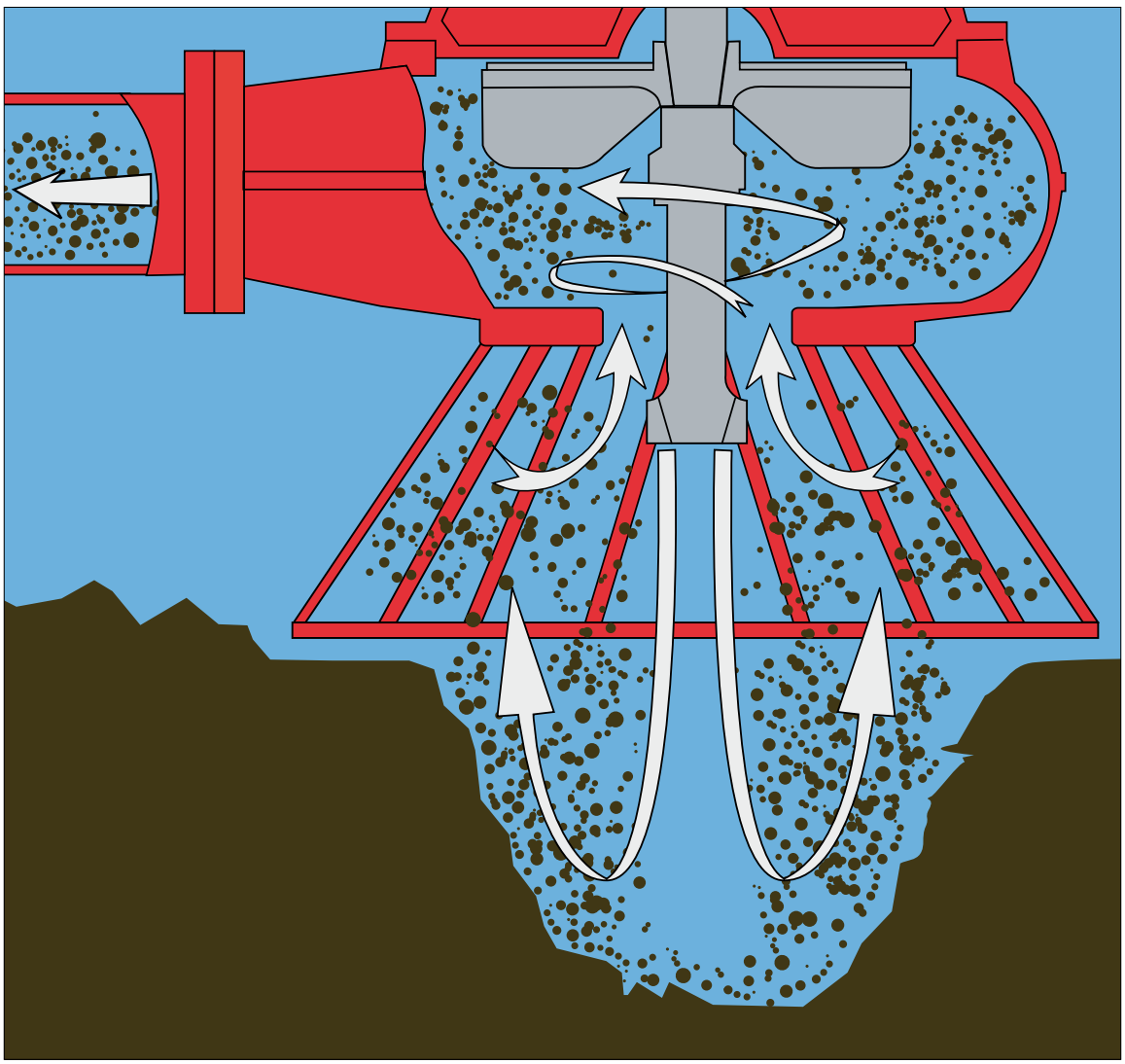
Submersible slurry pumps for pumping fluids with abrasive solids

A slurry pump is designed for pumping fluids with:

- Sand and gravel
- Bentonite
- Coal and ore slurries
- Abrasive sludge
- Drill cuttings
- Fluids with other abrasive solids

Stirs up and pumps sand, sludge and solids

To handle slurry with high concentration of solids a special impeller design is required according to the vortex principle. The impeller creates a strong vortex in the pumped media that carries most of the solids/abrasives through the pump housing. This minimizes the wear on the impeller. As the wear pattern will be evenly spread over the impeller, excessive vibration is avoided. The external vortex also has a strong stirring effect on the abrasives below the pump inlet. The pumping is even more efficient thanks to the agitator. The agitator creates a jet beam downwards that feeds the impeller with high-density material.



Low speed – long life

As the impeller works "freely" it does not rely on narrow clearances for high performance. Wear will have little effect on the output, resulting in constant high performance over a long period. Pumping slurry requires a powerful motor with low speed. Grindex BRAVO pumps are equipped with 4-pole low speed motors (1750 rpm), available in sizes from 5 to 45 kW.

The start equipment for the BRAVO pumps can be provided with different motor- and surveillance protection, depending on applications and customer demands.

Technical data

Pump type
Electrical submersible slurry pump

Classification
Protection class: IP68
Max. submersion depth: 20 m (66ft)

Power cabel
SUBCAB, 20 m (66ft)

Discharge connection
Hose or flange

Material
Motor housing: Cast iron
Seal housing: NiHard 4
Volute: NiHard 4
Hose adapter: NiHard 4
Impeller: NiHard 4
Agitator: NiHard 4
Shaft: Stainless steel
Nuts and screws: Stainless steel

Accessories
Motor and surveillance protection

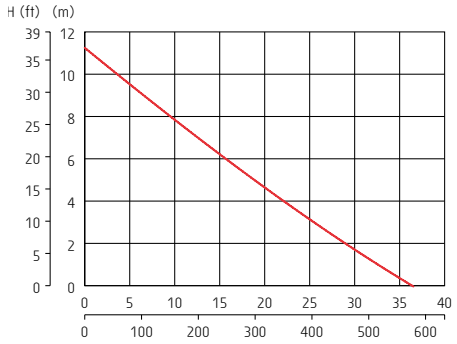
Limitations
Max submersion depth: 20 m (66ft)
Max liquid temperature: 40°C
pH of the liquid: 4-10

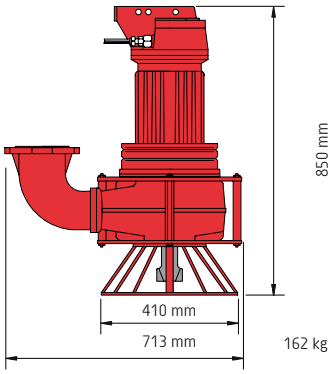
Specifications can be changed without notice.

SLURRYPUMPS: BRAVO 20 – BRAVO 30 – BRAVO 40

BRAVO 20

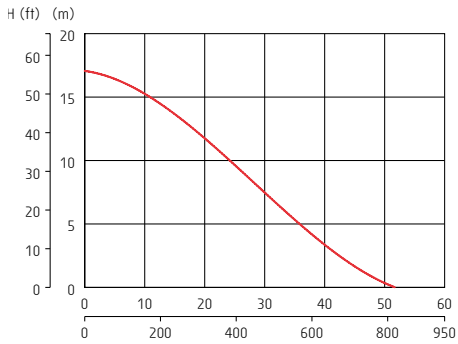
Technical data	
Discharge connection	4″
Rated output	5.4 HP
Max power consumption	5.1 kW
Shaft speed	1750 RPM
Rated current at 460 V	8.7 A
Rated current at 575 V	7.0 A
Solid passage with/without agitator	30 / 80 mm

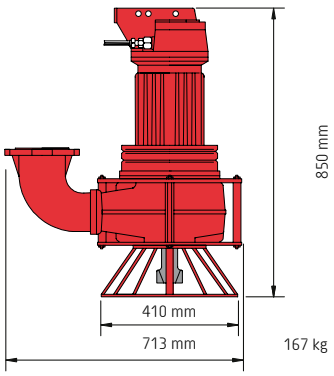




BRAVO 30

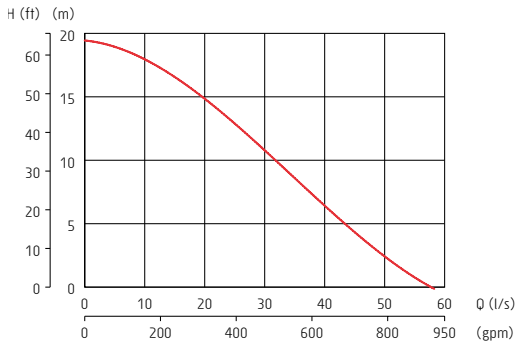
Technical data	
Discharge connection	4″
Rated output	11.5 HP
Max power consumption	10.6 kW
Shaft speed	1750 RPM
Rated current at 460 V	15.3 A
Rated current at 575 V	12.3 A
Solid passage with/without agitator	30 / 80 mm

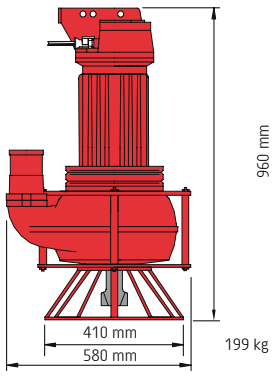




BRAVO 40

Technical data	
Discharge connection	4″
Rated output	20 HP
Max power consumption	17.5 kW
Shaft speed	1750 RPM
Rated current at 460 V	26 A
Rated current at 575 V	21 A
Solid passage with/without agitator	35 / 100 mm

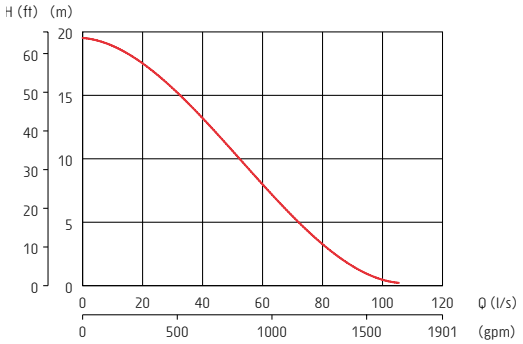


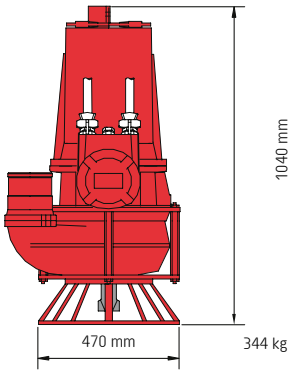


SLURRYPUMPS: BRAVO 50 – BRAVO 60 – BRAVO 70

BRAVO 50

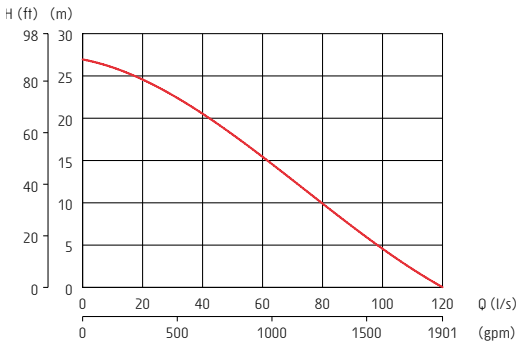
Technical data	
Discharge connection	6″
Rated output	33.5 HP
Max power consumption	29.8 kW
Shaft speed	1750 RPM
Rated current at 460 V	46.1 A
Rated current at 575 V	36.4 A
Solid passage with/without agitator	50 / 100 mm

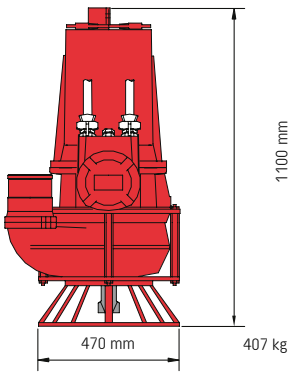




BRAVO 60

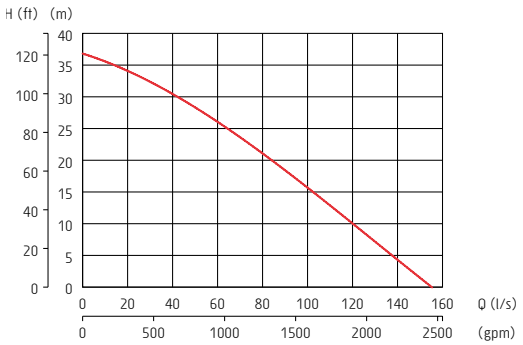
Technical data	
Discharge connection	6″
Rated output	52.3 HP
Max power consumption	45.4 kW
Shaft speed	1750 RPM
Rated current at 460 V	66.2 A
Rated current at 575 V	52.9 A
Solid passage with/without agitator	50 / 100 mm

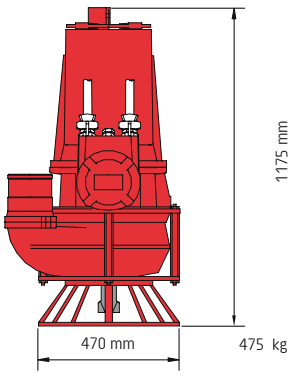




BRAVO 70

Technical data	
Discharge connection	6″
Rated output	73.7 HP
Max power consumption	62.5 kW
Shaft speed	1750 RPM
Rated current at 460 V	86.1 A
Rated current at 575 V	68.9 A
Solid passage with/without agitator	50 / 100 mm





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The Grindex team.

For some 50 years, Grindex has specialised in designing and manufacturing electrical submersible pumps for professionals. Durable and dependable, they are used in the most demanding and specialised applications worldwide. We have delivered over 300 000 pumps in more than 100 countries.

We offer pumps for almost any application. Our range includes drainage pumps, sludge pumps, slurry pumps and stainless steel pumps.

When you are running a Grindex pump, you can rest assured that a dedicated team is watching your back. Our experts are always there to see to your every need. Through our global network of sales and service centres, we provide the best level of support possible – day and night, seven days a week.
It's all part of the service.

For more information, please visit **www.grindex.com**

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Grindex AB • Box 7025 • SE-174 07 Sundbyberg • Sweden • Tel +468 606 66 00 • Fax +468 745 53 28 • marketing@grindex.com